

AbstractA Blade Cooling Arrangement

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Turbine blades used in jet engines generally require cooling in order to achieve desired engine performance. Cooling of blade tip areas is difficult due to the limited space available such that thickening tip areas in order to 10 allow passages and holes to be incorporated adds to weight and therefore stressing along with causing additional manufacturing costs. The present cooling arrangement includes coolant release passages 5 which present coolant flow to coolant entrainment elements or fins 2 such that the 15 coolant flow is entrained close to the blade tip surface 12. Thus, turbulent air flow caused by adjacent shrouds and edges are inhibited from diluting the coolant flow and therefore reducing thermal efficiency.